RAPPORT

DE

L'INSPECTEUR MÉDICAL

ET

BACTÉRIOLOGISTE

Y INCLUS LE RAPPORT DE

L'INSPECTEUR SANITAIRE

POUR L'ANNÉE

- 1922 -

Présenté au Comité Sanitaire le 5 Juin 1923.

JERSEY:
J.-T. BIGWOOD, IMPRIMEUR DES ETATS.
13, BROAD STREET

(100) 1923. — 8 —

RAPPORT

DE

L'INSPECTEUR MÉDICAL

ET

BACTÉRIOLOGISTE

Y INCLUS LE RAPPORT DE

L'INSPECTEUR SANITAIRE

POUR L'ANNÉE

- 1922 -

Présenté au Comité Sanitaire le 5 Juin 1923.

JERSEY:
J.-T. BIGWOOD, IMPRIMEUR DES ETATS.
13, BROAD STREET

(100) 1923

AU COMITÉ SANITAIRE.

L'An 1923, le 5e jour de Juin.

LECTURE a été donnée des Rapports de l'Inspecteur Médical et Bactériologiste et de l'Inspecteur Sanitaire pour l'année 1922, avec Tableaux y relatifs ;

Le Comité a ordonné que lesdits rapports seront imprimés avec les Tableaux et les Relevés y annexés, pour être ensuite distribués aux Membres des Etats.

ERNEST LE SUEUR,
Greffier.

To the President and Members of the Sanitary Committee.

GENTLEMEN,—

In accordance with the Regulations of the Sanitary Committee, I herewith submit the Annual Report for 1922.

Dr. P. Chappuis having retired on the 31st March 1922, I was appointed to fill the vacancy as from April 1st, 1922.

I wish to record my appreciation and thanks for the help which Dr. Chappuis has given me, not only on taking over, but whenever I have turned to him for assistance.

During the year there have been changes in the personnel and the present personnel are working loyally and well.

I should like to register my deep appreciation for the immense help accorded to me by Jurat Le Boutillier, late President of the Sanitary Committee.

I am,

Gentlemen,

Your obedient Servant,

P. JANVRIN MARETT, Lt.-Col.
M.O.H. States Jersey.

JERSEY.

The Island of Jersey is the most Southern and the largest of the Channel Islands Group. It has an acreage of 28,717 acres giving roughly a population of 1.4 persons to the acre.

Population Census 1921. 49519 inhabitants.

Estimated population 1922. 49760 inhabitants.

The island is highest on the North-East Coast having a slight slope from East to West, and a fall from North to South.

The high ground on the North coast has offsets running South allowing of the formation of Valleys which run in a North and South direction.

The greater portion of the Island is sheltered from the North, and owing to this and to its fertile soil, the inhabitants are chiefly engaged in Agriculture.

The Island is famous as a holiday resort and as a home for those who have lived many years in the Tropics.

The average rainfall is 33.49 inches and the average maximum and minimum combined temperatures is 52.2 F.

The fact that Jersey is a holiday and a health resort has a bearing on the prevalence of disease. The passenger traffic with England and France, according to official returns amounted to 86,561 arrivals, of which number roughly 1/6th came from France. Each of these individuals was a potential carrier of disease and care has to be exercised over these arrivals, more especially as regards persons coming from areas which are known to be suffering from Infectious Diseases.

As an example, Diphtheria, which during the year has been prevalent in London, may have been imported to a certain extent, thus increasing the incidence of this disease.

The reason for Infectious Diseases being spread from place to place is that those who are sickening and those who have recovered are capable of being carriers and dissiminators of infection. Above all one must remember that the seaside is the place to which convalescents are sent.

The progressive increase of Diphtheria was a matter which called for serious consideration and in the hope of lessening its incidence, the measures as regards release from Quarantine were brought up to the English standard, viz a minimum of 4 weeks quarantine together with a negative bacteriological examination. With these measures, the number of cases has fallen from 225 in 1921 to 144 and 11 carriers in 1922.

Isolation is best carried out in Hospital where efficient supervision is maintained right through convalescence, and thorough disinfection carried out prior to discharge.

Of the 144 cases of Diphtheria 76 occurred in the Parish of St. Helier, and 68 were distributed throughout all the country Parishes. Seasonal distribution shows the usual rise in Spring and in Autumn.

A point of interest is that of house distribution ; of the 144 cases, only 88 were single cases, the remaining 56 occurred in groups. Of these groups, the biggest was that of six cases in the same family, in two families there were 5 and 4 cases respectively, whilst in seven families there were 3 cases in each, and the remaining 20 cases occurred in pairs in 10 families.

Forty-five cases were treated by home isolation and 110 by isolation in Hospital.

The outstanding lesson is that, of the multiple infections which were undoubtedly due to delay in calling in the family physician.

A point which requires emphasis is, that it is a common idea that diseases which are not notifiable. are therefore not infectious, two examples are Whooping Cough and Chicken Pox. Parents and teachers would do well to bear this in mind.

This is the first Annual Report which I have the honour to submit, and a précis of the work which has been begun is here given. This will be a feature of the Annual Reports, for by comparison only will we be able to see where progress is made, and where weakness calls for redoubled endeavours.

Administration.—The year 1921 saw the birth of a new Committee " Le Comité de Santé Publique " —this Committee born of requirements although young, will take the burden of the Public Health on its shoulders, and is a parallel to the Ministry of Health, in England. All matters concerning the Public Health belong to it by right.

Whether the " Santé Publique " will remain constituted as at present depends on the future of the other Committees—The Hospital, " The Egouts' and the Sanitary.

For ease in administration one would recommend a single Committee the " Santé Publique " supervising sub-Committees formed by members of the Santé Publique, which Sub-Committtees would control the affairs of the Hospital, the Sewers and the Sanitation.

The important fact is that these Committees have to deal with the Public Health, preeminence being given to the Santé Publique which has to deal with the Prevention of Disease in its truest sense, that

is, before the appearance of disease ; The Sanitary with the prevention of the spread of disease and the Hospital with the treatment of Disease.

The Santé Publique Committee should take over the Administrative burden of the Public Health and the framing of the Public Health Act. This Act would take cognisance of the different age periods in the life history of the Citizen and would frame laws dealing with these under the following headings :—

1. Pre-natal represented by Maternity, which is dealt with in the Registration and Supervision of Midwives by virtue of the Midwives Act 1922.

2. Infancy represented by the Infant Welfare Centre, which has justified its existence and hitherto has been supported solely by voluntary contributions.

   To encourage its expansion, not only in St.-Hélier but in the country Parishes, it is suggested that pro-rata State Aid would result in a great impetus to the movement and would be reflected in the increased well being of the coming generations. Infancy extends from the 10th day of Life till the child enters School and is taken on the School Register.

3. School Age. This is the receptive age and education in hygienic matters should be both practical and theoretical. The provision of Public Baths, the teaching of cleanliness of person and of surroundings, the provision of the best Sanitary accommodation would by contact and use familiarise the growing child to those things which are of vital importance.

4. Adult Life.—The provision of Hospitals.—The General Hospital with Out-Patient Departments—the Infectious Diseases Hospital and the Sanatorium.

These and other matters such as Housing—the Supply of pure water, milk and foods, the provision and upkeep of proper drainage and sewerage are the subjects for administrative attention.

The installation of a bacteriological laboratory has been of enormous value and has allowed of work being carried on in the examination of water supplies—milk supplies and in the diagnosis of infectious diseases. All ærated water factories have been inspected, their water supplies analysed and their methods of manufacture and bottling supervised. The owners have made the work both easy and pleasant by the willingness with which they carried have out all recommendations.

MILK SUPPLY.

The number of Cows and Heifers in milk is recorded as 4,796.

Of dairy farms registered there are 537. The parish of Trinity has the most with 87 and St. Clement's the least with 16 farms.

Quality of Milk. The Jersey Cow is well known for its rich milk.

According to Mr. F. W. Toms, F.I.C., the Public Analyst's reports, the average fat content is 5.21%; the English Law lays down a minimum of 3·93% fat.

Cleanliness.—This leaves much to be desired, and as matters stand at present, the short way to avoid the result of the want of cleanliness is to pasteurize or boil all milk on arrival at the consumers.

During Health Week demostrations were given on (1) the keeping properties of milk which had been subjected to Pasteurisation and (2) on the bacterial content of milk diluted up to one in a million and showing the presence of sewage contamination.

During the Summer months, bacteriological examinations of milk and of water from farms were carried out, the contaminations in the milk ran parallel with those of the water.

The question of unclean milk is receiving world wide attention and if we wish to keep abreast of the times, it is due to us to improve the housing conditions of our cattle and the handling of milk. To check the growth of organisms, milk should be drawn off under clean conditions, it should be cooled immediately after milking and should be conveyed to the consumer in vessels which have been sterilised by steam.

The only pasteurisation which has been seen is carried out for commercial as against health reasons.

The net result is that the Reglement on Dairies which has been in force for some time has not appreciably improved the condition of the milk supply.

A Reglement dealing with dairy farms, and drawn up in collaboration with the Farmers' Association, would not only improve the condition of milk as a food, but would greatly increase the value of our cattle, in just the same way as the care given to poultry has improved their value, out of all proportion to the initial expense incurred.

FOODSTUFFS.

The supervision of foodstuffs, chiefly calls for supervision of methods of storage rather than to the quality of food in its fresh state.

Where most of the meat imported is frozen or chilled, the various examinations carried out prior to export precludes the importation of diseased meat.

The beasts slaughtered at the Slaughter House are inspected and although regulations lay down that slaughtering must be carried out under supervision, a certain number of animals, mostly pigs, are killed and sold for human consumption without undergoing any inspection.

The only way in which the Public can be protected is by the use of official stamping of all joints which have been passed as fit.

The question of the treatment of foodstuffs with preservatives is receiving attention. Not only is it injurious to health to consume unknown quantities of chemical preservatives but the sale of preserved foods as fresh is a false trade description.

During the year consignments of perishable foodstuffs including fruits and vegetables have been dealt with. On a few occasions consignments of canned goods have had to be condemned.

WATER SUPPLIES.

The failure of the rainfall in 1921 left its mark on the water supply both as to quantity and to quality.

The total number of streams discharging into the sea, as marked on the Ordnance Map is 30. Twelve of these are short in their course and discharge on the North Coast.

The main watershed of the Island runs along the North Coast and the largest streams rise in the Parishes of Trinity and St. John's. There are five large streams which discharge on the South side of this watershed.

Subsidiary watersheds exist in the Eastern and in the Western Parishes.

The origin of our water supply is not settled, the statement that it is supplied from France is not proven, and the probabilities are that, as is usual, our supply is the result of rainfall and our streams the result of geological faults, where the rainfall after percolating to an unknown depth is held up by an impervious stratum, and the water rising and brimming over forms the streams.

As an illustration one can take the case of water supply in 1921. During that year when the Waterworks Stream diminished appreciably, the St. Peter's Valley stream was able to supply the requisite water. An examination of the Ordnance Map shows that whereas the Waterworks Streams issue at a height of about 400 feet, the St. Peter's Valley Stream emerges at about 340 feet above sea level, and therefore the latter receives water from 60 foot of vertical soil which is out of reach of the former.

The surface water which is open to pollution is practically the only supply of water which is available.

In St. Helier there are a few wells, driven through the impervious clay, which tap a layer of deep uncontaminated water ; So long as these wells are properly built and efficiently protected, their water is wholesome.

Water Supply in the Country.—The Supply is chiefly from shallow wells situated at the lowest portion of the farm, and by its low lying position allowing of free contamination.

Waterworks Supply.—The supply is from Streams rising in St. John, conservancy is carried out, and besides money spent on water conservancy the Company rely on storage, allowing of sedementation and the action of sunlight, before reaching the consumer filtration and chlorination are carried

out. These precautions are necessary owing to the original pollution of the water which is a surface water. With increased consumption the effects of storage are not too apparent and this necessitates the added precaution of Chlorination. This proceedure was undoubtedly one of the factors which materially helped in keeping the Armies in good health during the Great War.

The capacity of the two reservoirs is 40 million gallons. The daily consumption is approximately 300,000 gallons in Winter and 500,000 gallons in Summer. It is estimated that the total number of inhabitants supplied with Waterworks water is between 27,000 and 30,000, allowing of an average of 10 gallons per head, which is about half the recognised allowance.

The outstanding features in the water question are :—

1. The pollution of the water, owing to most of the water being surface water and therefore open to contamination.
2. The relatively enormous volume of water which is allowed to run to waste.

To obviate these and to provide a wholesome and constant water supply to all parts of the Island, the deep water supply should be tapped by wells sunk into the supplies held up at the geological faults, the water being pumped up to the surface could be piped and distributed to all parts of the Island by means of gravity.

The Scheme would require a considerable initial outlay, but the benefits of a pure water supply would be reflected in the improved health not only of the inhabitants but of the farm stock, resulting in a lessening of infectious disease chiefly of the intestinal type.

The necessity for a pure and wholesome water supply is as much needed in the Country as in the Town, owing to the contamination of the milk supply through the washing of dairy utensils in impure water.

Drainage, Sewerage and Sewage Disposal.

In dealing with the water supplies, reference has been made to their contamination with sewage. These two subjects have a distinct bearing one on the other and both are of equal importance.

St. Helier.—The town of St. Helier has a sewerage system which was constructed several years ago. From time to time experts have been called in to report on a new sewerage system. When this is decided on, the work owing to its magnitude and to its costliness will require to be carried out in stages. Once committed to a scheme, a certain definite section should be dealt with at a time, till the whole scheme is completed.

The great difficulty is due to want of fall, and suitable fall can only be obtained by some form of pumping and the work would require to be begun with the installation of the necessary pumping station at each outfall.

Until such time, gross defects are being dealt with, where sewers passing under dwellings are defective to the extent of allowing sewer gas to enter, they are being rendered impervious.

Country.—The value of sewage from the agricultural point of view should be a sufficient incentive for the farmer to lay out a little capital to allow of his saving this source of nitrogen, which at present not only runs to waste, but is liable to contaminate the water supply.

To avoid the waste every farm should have a Sanitary area, as far removed as possible from the water supply and from the house. The area to contain the liquid manure cistern, into which all drains from stables and sheds should be led, and over the cistern should be built the manure pit from which all liquids should pass by a gulley into the cistern. The " weeping " from a manure heap is partly due to the action of organisms out of contact with the air, causing liquefaction of the solid portion in the manure.

Where water is available, closet accommodation should be of the " wash down " pattern and the soil pipe should discharge into the liquid manure cistern.

Where water is scarce then the dry earth bucket system with burial of excrement by trenching is recommended.

That excrement should be properly covered over is recognised, the reasons for so doing are not always understood and, simply stated, are as follows :—

1. Excrement is an attraction to the house fly which breeds out in filth, becomes contanimated and causes contamination of foodstuffs and gives rise to intestinal infectious diseases.
2. Foot wear gets soiled and filth is liable to be carried into houses.
3. Rain falling on uncovered excrement washes it into the nearest water supply. The same might be said of covered excrement, but where properly covered it is deposited in the ground as far away as possible from the water supply.

A question which requires urgent attention is the building of bungalows without adequate Sanitary conveniences and regulations are necessary to put a check to this.

At the present time on some farms, the disposal of human excrement is not dealt with, in some cottages there is no sort of closet accommodation provided, in others an outbuilding is used and the ground in the neighbourhood is fouled.

It has been mentioned what the dangers are resulting from this neglect and one that has to be amplified is the fly question. Of flies, the most dangerous is the common house-fly (Musca domestica) which can be described as a savage taking on civilised habits, in that, breeding out in filth, it, in its adult stage of the winged insect, acquires the habit of feeding on our foodstuffs and returning to its filth for the purpose of depositing its eggs.

The only ways in which human excrement can be covered over are by means of water or by means of earth, where the former is used, filth should be discharged into the liquid manure cistern where a septic tank action will result if inlet and outlet are submerged.

Where water is scarce then the dry earth bucket is the only alternative. The objection to the clearing and cleansing of the bucket is due to novelty and when it is known that the bucket latrine system was the only one used in standing camps during the war, and that all who served are accustomed to them, the objection should disappear, especially when it is realised that in efficient disposal there is no necessity to soil the hands.

Disposal of Refuse.

In St. Helier and in that portion of St. Saviour bordering on St. Helier there is a weekly collection of house refuse, its ultimate disposal is by incineration.

Portable Sanitary bins with covers should be kept by all householders, the collection should be twice weekly, and suitable carts, low in the body to allow of easy tipping, should be employed. The incineration of refuse gives power and this power over and above the present uses to which it is put, could be used for heating water for Public Baths.

The twice weekly clearance could be easily effected if motor transport were taken into use.

In the Country Parishes there is a crying need for the disposal of refuse by concerted action on the part of the parish authorities. The necessity for removal and disposal of refuse is bound up with the life histories of scavengers of very inferior and dangerous types to wit rats, mice and flies.

The rodent population will vary in proportion to the refuse and foodstuffs lying within their reach and this is the reason why at present rats are so prolific.

To combat the rat pest it must be done with a knowledge of their habits, remove all refuse and the rat population is bound to diminish. In many instances where there is rat infestation, it is due to house drains not being properly trapped off from sewers.

As regards the fly population this is most evident in a warm Summer, and given a warm Summer, the increase in flies is apparent not only by their presence but by the increase in Infantile Diarrhœa and an increase in Infant Mortality.

Stable refuse. In spite of the increase in motor vehicles, the number of horses kept in the town is big, and the danger which arises from their stables cannot be overrated, owing to close proximity of manure heaps to dwelling houses of the poorer quarters. Horse manure is par excellence the breeding ground of the house-fly and removal should be twice weekly.

The life history of the fly for the first 3 or 4 days is intimately connected with manure and therefore removal of manure twice weekly will remove larvœ before they leave it, proper stacking of manure should be done at a distance from dwelling houses.

Removal should be carried out by the Authorities and packing of manure kept under control, the value of the manure should be taken into account and fly breeding could be kept in control by one trained man.

The more frequent the removal of manure and the use of special portable bins would help to eradicate the fly nuisance.

Housing Accommodation.

In last year's report, Dr. Chappuis pointed out that overcrowding existed, and he also gave a list of overcrowded dwellings.

The question of overcrowding is of general interest, more specially where servants no longer live in.

Overcrowding in the public mind represents too many people to the area occupied and leaves out of account the opportunities missed in allowing of admission of sunlight and of fresh air.

The type of dwelling found both in Town and in Country, which increases overcrowding is the " back-to-back " type of dwelling. The reason for the prevalence of this type of dwelling is the existence of boundary walls against which these houses are built and because they are party walls windows are not allowed. All houses should be built so as to allow the maximum admission of fresh air and sunlight.

The relationship of this type of dwelling to the Death rate from Tuberculosis is shewn by the following table :—

All " back-to-back " houses.			Deaths	5.2	per 1,000.
56%	"	"	"	3.6	"
23%	"	"	"	3.3	"
No	"	"	"	2.8	"

The " back to-back " type stands condemned and should disappear.

All new dwellings should be built taking all precautions against dampness, the oversite should be concreted or asphalted and damp proof courses should be inserted.

The reasons for overcrowding and the shortage of suitable dwellings can only be remedied by the scrapping of condemned buildings and their replacement by artisans blocks.

The difficulty which would arise is due to the number of small owners, and to deal justly and efficiently with these, powers would have to be obtained from the States.

The housing question and the consequent overcrowding undoubtedly have a harmful effect on the Public Health.

The building of workmen's dwellings outside the Town will in time relieve the overcrowding, but will not remove the slum areas and it is these that are the root of the evil. What is necessary is the gradual displacement of slum properties and their replacement by suitable dwellings, and in this work one would hope that Labour organisations would show a keen and practical interest.

Vital Statistics including Tabular Statements of the sickness and mortality.

The figures issued by the Ministry of Health for 1922 for purposes of comparison of Vital Statistics are as follows :—

	Birth rate.	Death rate.	Infant Mortality.
England & Wales ...	20.6	12.9	77.
105 Great Towns and County Boroughs including London..	21.5	13.	81.
155 smaller Towns ...	20.5	11.7	75.
London.....	21.4	13.4	73.
Jersey	17.5	15.7	77.9

The Birth rate, England and Wales is the lowest recorded except during the War years. The Birth rate Jersey is the highest recorded since the War.

The Infant Mortality for England and Wales is actually the lowest on record whilst that for Jersey is the lowest but one ; in 1919 the Infant Mortality was 77.1.

The comparison is made, as one judges by comparisons, however one must compare correctly. In dealing with Public Health one is dealing with populations. Here in Jersey one is dealing with a mixed population and to arrive at a correct comparison one should take the average of the Vital Statistics of an English and of a French town of similar size and population.

Further, Health is a condition which depends on Cost, the ratio of the amount of money spent in London, on Public Health, compared with that spent in Jersey, should be taken into account.

When we have expended money judiciously, on the General Hospital, on the building of an Isolation Hospital. When a pure water supply is available in all parts of the Island. When the sewerage system has been put in order, when the collection and disposal of refuse is efficiently carried out, then shall we see our Vital Statistics compare more than favourably with those of England and Wales.

In order to appreciate the reasons for an expenditure of money, one must endeavour to explain to all, the " rationale " of one's acts.

It is not expected that the present requirements, which in many cases have been postponed on account of the War, will not require a special expenditure, which had it been spread over a number of years would not appear excessive.

What one must remember is that when an individual or a body of individuals has set out to obtain something, firstly there must be a knowledge of the exact thing wanted, in this instance, Health, and secondly that the object has a monetary value, that to obtain it, money must be spent, and that once obtained, Health has a value in direct ratio to the importance put on it by each individual possessor.

ZYMOTIC DISEASES.

Small Pox.—No cases of this disease occurred, but owing to its increase in England and to the unprotected state of the population, preventive measures were adopted :—Free vaccination was made available and for this purpose Calf Lymph was distributed to the Medical Practitioners, who by Law, are Public Vaccinators. Chicken Pox owing to its similarity to Small Pox was made notifiable.

Zymotic Diseases, deaths registered were as follows :—

Measles	1
Scarlet Fever	—
Whooping Cough.....	2
Diphtheria	3
Enteric Fever Group	1
Diarrhœa	11
Total.....	18

Giving a Zymotic death rate of .36 per 1,000 inhabitants.

Notifiable Diseases.

During 1922, 724 cases were notified, compared with 979 notified during 1921.

Table III shows details of the diseases notified according to age groups and to Parishes, and numbers removed to Hospital.

There is a general dislike to removal to Hospital, which is mostly met with amongst the ignorant, the more educated recognise that hospitalisation is the best method of Isolation and undoubtedly the best for results.

Measles.—Great care in the prevention of spread of this infection is required, as it is not appreciated that Measles is a forerunner of Pulmonary Tuberculosis.

Scarlet Fever is a of mild type and of the 11 cases treated in Hospital only one showed symptoms of any severity. No ear complications supervened.

Whooping Cough is not notifiable and therefore by most people, is looked upon as non-infectious, the death rate amongst infants is appreciable, and amongst children, it is with Measles, a forerunner of Pulmonary Tuberculosis.

Diptheria generally is of a mild type and treated early with Anti-serum the mortality is negligible. Owing to its mildness a case is not always seen by a doctor and hence the added difficulty in stamping out this disease. Other remarks on Diphtheria have been made elsewhere in this report.

Enteric Group Fevers—The one death recorded was diagnosed clinically, the man dying before specimens for bacteriological examination were submitted. With the exclusion of the Cancale Oyster, it is hoped that Typhoid will cease. Other organisms of the Coli-Typhoid Group take their toll of human suffering, of which Paratyphoid B is most in evidence.

Diarrhoea is not a notifiable disease. It is due to climatic conditions and reaches its maximum in hot summers infection being carried by the House-fly. As against the 11 deaths recorded in 1922 there were 37 registered in 1921.

Tuberculosis a notifiable disease is very rarely reported, of the 44 cases notified, 14 were notified by the Ministry of Pensions, and yet 69 deaths from the disease were registered.

Influenza.—Of the total 724 notifications, Influenza accounted for 429. a percentage of 59.2, 5 deaths were registered.

P.-JANVRIN MARETT, Lt.-Col.,
M.O.H. States, Jersey.

I have the honour to include the Sanitary Inspector's, Mr. C. S. Dart, Report.

Public Health Office,
Royal Square,
Jersey.

To the President and Members of the States Sanitary Committee.

Gentlemen,—

I have the honour to present to you my first Report, giving details and particulars of work carried out by me from February 1st to December 31st, 1922.

From February 1st to November 3rd I was engaged as part-time Inspector (*three days per week*), from November 6th I have devoted whole-time to the duties.

I was engaged primarily to carry out duties very necessary, and which hitherto had not received attention, viz.—The systematic and periodical inspection of various premises, such as :—Dairies and Milkshops, Dairy Farms, Boarding Houses, Schools, &c. These duties I carried out to November 6th, from which date I have carried out the general duties of Sanitary Inspector.

Inspections.

800 inspections, re-inspections (to supervise, examine and test work, &c.) and miscellaneous visits were made, details and results of which are given hereunder.

Dairies and Milkshops.

All premises on which the sale of milk is permitted were inspected during the year. 77 inspections were made and the general condition found to be satisfactory. The Sanitary defects reported were few, and were remedied by the respective owners or occupiers without delay. Numerous complaints were received from dairymen of the insanitary conditions and the careless handling of milk at various dairy farms; investigations proved the complaints well founded. This matter is treated under the heading of " Dairy Farms."

Dairy Farms.

203 inspections were made in connection with Dairy Farms. The condition of many was found to be most insanitary, and incompatible with the production of clean and wholesome milk. A large number of cowsheds were found to be in a dirty condition, insufficiently lighted and ventilated, and improperly drained. The closet accommodation at these farms is chiefly of the " privy " type, several very foul privies were condemned and converted into water—or earth—closets. The retention of large quantities of excreta near dwellings is most harmful to health, and the case becomes worse when as almost invariably happens, the pit leaks and allows its contents to pollute the soil and the subsoil water. The harmful results of the foregoing were shewn by the Bacteriological and Analytical Reports upon the well-water at various farms.

Boarding Houses.

156 inspections were made to Boarding Houses. The chief defects reported in connection with these premises were :—The absence of proper accommodation for the storage of food, the absence of a

proper refuse receptable (these two defects were general), defective drainage, and insanitary closet accommodation.

The cubic capacity of a large number of sleeping apartments was estimated—No cases of overcrowding were discovered on the premises inspected.

Included in the above are inspections of several lodging houses occupied by persons of the poorer class. The majority of these houses were found to be in a dirty and insanitary condition. Two Nursing Homes were also inspected ; in the cases overcrowding and other Sanitary defects were discovered.

Schools.

129 inspections were made to Private and Elementary Schools. Several Schools were found to be without sufficient and proper Sanitary accommodation. The cubic capacity of a large number of classrooms was estimated, with the result that several serious cases of overcrowding were discovered.

All reports on inspections of Elementary Schools were transmitted to the States Education Committee for further action.

Included in the above is a detailed inspection of the Jersey Home for Boys, Gorey. The report on this inspection was transmitted to the Committee concerned.

Mineral Water Factories.

14 inspections were made to Mineral Water Factories, special attention being directed to the water-supplies, and arrangements for the cleansing of bottles, &c.

Infectious Disease Investigations and Complaints.

96 inspections were made in connection with the above on behalf of the late Inspector during his absence from the island on vacation. Notices served were transferred for necessary attention.

Water Supply.

41 samples of water were collected and delivered for bacteriological examination and chemical analysis. 22 wells were found to be polluted, the majority of which were at farms, where the pollution was traced to one or more of the following causes :— (1)Leakage from defective drains and privies. (2) Soakage from middens. (3) Soakage from surroundings surfaces. (4) Decomposable matter fallen into improperly covered wells. Most of the wells examined were found to be constructed of Random Rubble set dry, thus allowing any of the above-mentioned pollutions to percolate through the sides of the well.

Notices.

158 Notices were served on owners and occupiers for sanitary defects found. 24 additional communications were sent in connection with Notices. 13 detailed Reports (chiefly on inspection of schools) were submitted. A large number of improvements have been made on advice to owners and occupiers.

SANITARY DEFECTS REMEDIED.

DRAINAGE :—	
Drains re-constructed	9
Disconnecting Traps or Chambers inserted	12
Gulley Traps fixed	55
Waste Pipes disconnected, trapped, &c	97
Sinks provided	10
WATER CLOSETS—	
Basins and Traps renewed or cleansed	44
Water provided	22
Apartments cleansed and lime-whitened	55
Otherwise improved	22
PRIVIES—	
Converted into water—or earth—closets	29
Cleansed	17
WATER SUPPLY—	
Wells cleansed	6
Wells closed	6
Waterworks Service provided	8
MISCELLANEOUS—	
Rooms of Dwelling Houses cleansed and distempered	76
General improvements to Dwelling Houses	21
Cowsheds and Stables cleansed and lime-whitened	54
General improvements to Cowsheds and Stables	8
Dairies and Milkshops cleansed and lime-whitened	16
School-rooms cleansed and distempered	9

I am, Gentlemen,
Your obedient Servant,
CLAUDE S. DART, JUN.,
Sanitary Inspector.

P. JANVRIN MARETT, LT.-COL.,
M.O.H. States, Jersey.

TABLE I.

Vital Statistics of the Island of Jersey for the Year 1922.

Population Estimated	Births		Deaths		Death rate for Tuberc'l'sis	Death rate for Cancer	Deaths under 1 year		Marriages	
							Number	Rate per 1,000 births	Number	Rate
49760	872	17.5	831	16.7	1.3	1.9	68	77.9	387	7.7

TABLE II.

Percentage of Deaths at different age groups 1922.

Years.	Under 1	1–5	5–15	15–25	25–45	45–65	65 & up.	
Total deaths...831	68	13	16	33	78	226	397	831
Rate per cent.....	8.18	1.56	1.92	3.97	9.38	27.19	47.77	99.97%.

The death rate in the group 65 years and upwards represents nearly half the mortality.

TABLE III.

Cases of Infectious Diseases notified during 1922.

	Number of cases notified.								Total cases notified in each Parish.												Total cases removed to Hospital.
		At ages in years.							St. Helier	St. Mary	St. Martin	St. Lawrence	Trinity	St John	Grouville	St. Peter	St. Ouen	St. Saviour	St Brelade	St. Clement.	
	At all ages.	under 1	1–5	5–15	15–25	25–45	45–65	65 & up													
Diphtheria	155	1	14	97	20	20	2	1	76	19	10	10	7	6	6	5	4	4	4	4	103 & 7 carriers.
Erysipilas	3	—	—	—	—	2	—	1	1	—	—	—	—	—	—	—	—	2	—	—	1
Scarlet Fever	15	—	2	11	2	—	—	—	11	—	1	—	—	—	—	—	1	2	—	—	11
Enteric Fever	2	—	—	—	—	1	1	—	2	—	—	—	—	—	—	—	—	—	—	—	2
Paratyphoid B	4	—	—	1	—	2	1	—	2	—	1	—	—	—	—	—	—	—	—	1	—
Coliform Infection	2	—	—	1	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	1
*Tubercle	44	—	—	1	11	26	5	1	24	2	1	1	—	3	3	1	2	4	—	3	—
Measles	7	2	1	2	2	—	—	—	5	—	—	—	1	—	—	—	—	—	1	—	—
Chicken Pox	59	3	19	37	—	—	—	—	45	—	—	—	1	—	1	—	—	7	—	5	—
*Influenza	429	3	22	74	30	156	85	37	249	10	16	14	9	13	9	22	18	18	17	12	—
Ophthalmia Neonatorum	1	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	2	—	—	—	—	2	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	1	—	—	—	—	1	—	—	1	a visitor from Bristol											
	724	10	58	224	66	210	94	40													

*Of these 14 were notified by Ministry of Pensions.
†Of these 22 were not notified fully.

TABLE IV.

Causes of and Ages at Death during the Year 1922.—Island of Jersey.

Causes of Deaths.	All ages	under 1 year.	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards
Enteric (Typhoid)	1	—	—	—	—	1	—	—	—
Measles	1	1	—	—	—	—	—	—	—
Whooping Cough	2	—	2	—	—	—	—	—	—
Diphtheria and Croup	3	—	—	1	2	—	—	—	—
Influenza	5	—	—	—	—	—	—	3	2
Euciphalitis Letragica	1	—	—	—	—	—	1	—	—
Puerperal Septicæmia	4	—	—	—	—	1	3	—	—
Diarrhœa–Enteritis	11	5	1	—	—	—	—	1	4
Tubercle of Lungs	69	—	—	—	3	18	27	19	2
Tuberculous Meningitis	6	2	—	—	2	1	1	—	—
Other Tuberculous Diseases	11	1	1	—	2	2	4	—	1
Malignant Diseases	95	—	—	—	—	1	3	51	40
Bronchitis	67	5	—	—	—	—	1	12	49
Broncho Pneumonia	14	5	—	—	1	—	—	3	5
Pneumonia	53	3	2	1	—	1	9	17	20
Other Respiratory Diseases	9	—	—	—	—	—	—	6	3
Cerebral Hœmorrhage	69	—	—	—	—	—	1	21	47
Appendicitis	2	—	—	—	1	1	—	—	—
Alcoholism and Cirrhosis ofLiver	9	—	—	—	—	—	—	4	9
Nephritis	15	—	—	—	—	—	2	4	3
Congenital Malformations	46	46	—	—	—	—	—	—	—
Marasmus Debility, &c.									
Violent Deaths excluding									
Suicides	25	—	—	1	2	3	8	6	5
Suicides	10	—	—	—	—	1	3	4	2
Other defined Diseases	300	—	1	2	3	4	14	17	204
Diseases ill-defined or unknown	3	—	1	—	—	—	—	—	2
Total	831	68	8	5	16	33	78	226	397
Rate per cent	99.97	8.18	1.56		1.92	3.97	9.38	27.19	47.77

TABLE V.

Table of Laborotory Work, 1922.

Quarters.	April–June.	July–September.	October–December.	Totals
Throat Swabs.....	103	157	278	538
Sputum for T.B.....	15	22	44	81
Blood Swears	2	1	1	4
Blood Cultures	—	2	1	3
Blood for Widal.....	—	2	6	8
Blood for Wasserman...	—	5	3	8
Sputum for Organisms.	2	—	—	2
Urine for Culture	18	18	35	71
Urine for T.B.....	3	1	—	4
Urine Chemical	—	—	10	10
Fœces	4	7	20	31
Pus	1	1	4	6
Water	15	28	47	90
Aerated Waters	—	11	—	11
Milk.....	—	11	—	11
Gums and teeth.....	2	—	1	3
Vaccines	1	3	1	5
Cerebro-Spinal fluid ...	1	—	—	1
Skin.....	1	—	—	1
Tumours.....	—	—	1	1
Sewage	—	1	—	1
Oysters	—	1	—	1
Crab (tinned)	—	—	1	1
Totals.....	168	271	453	892

The following table gives details of Disinfection Work carried out by Mr. Pettiquin.

TABLE VI.

Disinfections of Buildings and Houses and of Bedding.

Months.	Scarlet Fever	Tuber-cule.	Diph-theria.	Insti-tutions	Cancer	Pneu-monia	Other Diseas	School	Bed-ding
January	4	8	13	5	1	1	—	5	10
February	1	4	16	4	7	1	—	9	14
March	—	7	22	2	3	2	—	5	15
April	3	8	14	1	8	—	5	6	4
May	2	6	7	—	2	3	3	4	8
June	1	3	6	1	8	—	1	3	11
July.....	—	10	4	—	4	1	2	1	8
August	1	4	5	—	6	—	2	2	7
September	—	3	17	—	5	—	1	11	12
October	1	5	15	—	10	1	1	8	9
November	1	5	6	—	2	—	3	4	7
December	2	11	11	—	10	—	3	2	9
Totals.....	16	74	136	13	66	9	21	60	114

*Other diseases include all other infectious diseases.